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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,524	03/22/2001	Barry Alan Kritt	RPS920000110US1	4736

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EXAMINER	
ORTIZ RODRIGUEZ, CARLOS R	
ART UNIT	**PAPER NUMBER**
2125	

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/814,524	Applicant(s) KRITT ET AL.
	Examiner Carlos Ortiz-Rodriguez	Art Unit 2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9,13-21,23-27,36-43,47-52 and 55-59 rejected under 35 U.S.C. 102(e) as being anticipated by Akasaka et al. U.S Patent No. 5,576,965.

Regarding to claim1, 2,13-15,23-25,36-38, 47-48 and 55 Akasaka et al. discloses a method for product fulfillment in an automated configure-to-order manufacturing system(see abstract lines 9-11), the method comprising the steps of: obtaining requirements for a product from a customer though a user interface (see col 12 lines 49-52); automatically (see col 3 lines 24-31)creating a plan from the requirements using a descriptive language, the descriptive language being hierarchical and object oriented(see col 1 lines 5-15; and conveying the plan to the automated manufacturing system, wherein the plan is used to manufacture the product satisfying the requirements(see col 3 lines 21-32); and storing the plan for future repairs and maintenance(see col 13 lines 12-21).

Additionally, regarding claims 1,15, 24, 37, 48 and 55 Akasaka et al. also discloses that an automated manufacturing system is capable of interpreting the descriptive language and the

manufacturing plan, and stores the manufacturing plan and builds the product(see for example col 54 lines 25-50).

Regarding claims 3,16,26,39,49 and 56 Akasaka et al. further discloses the method wherein the descriptive language describes the product by a plurality of objects, each object of the plurality of objects having an attribute, and the attribute being assigned a value(see fig 1 element 104 and col 1 lines 24-28).

Regarding claims 4,17,27,40,50 and 57 Akasaka et al. further discloses the method wherein each object identifies a component in the product, wherein the component can be either a physical part or a logical part(see col 6 lines 51-59 and col 1 lines 18-21).

Regarding claims 5,18,41 and 58 Akasaka et al. further discloses the method wherein the descriptive language is capable of describing a hierarchical relationship between objects(see col 7 lines 1-15).

Regarding claims 6 and 19,42,59 Akasaka et al. further discloses the method wherein the descriptive language is capable of describing a mechanical and electrical connection between objects(see col 7 lines 62-63).

Regarding claim 7 the method wherein the plan integrates the requirements with population rules that determine a sequence for manufacturing the product, and configuration rules a that determine proper configuration settings is inherent to Akasaka.

Regarding claims 8 and 20,51. Akasaka et al. further discloses the method wherein the automated manufacturing system includes a plurality of processes that use the plan to produce the product, the plurality of processes being software based(see abstract line 4).

Regarding claims 9 and 21,43,52. Akasaka et al. further discloses the method wherein the conveying step c) further comprises the step of: c1) providing a portion of the plan to a process of the plurality of processes, the portion being relevant to the process, thereby reducing the amount of information conveyed throughout the automated manufacturing system(see col 3 lines 22-32).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 10-12,22,28-35,44-46 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akasaka et al. U.S Patent No. 5,576,965 in view of Forth et al. U.S. Pub. No. 2002/0120521.

Regarding claims 10,44 and 53 Akasaka et al. discloses al the limitations of base claims 8,43, and 51 as stated above.

But, Akasaka et al. Fail to clearly specify an assembly process. However, Forth et al. discloses the method wherein one process of the plurality of processes is an assembly process, the assembly process including the step of generating assembly instructions from the plan (see page 7 paragraph 0061 first three lines).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Akasaka et al. and combining it with the invention disclosed by Forth et al. The results of this combination would lead to a method and system for object oriented approach and data model for configure-to-order manufacturing system.

One of ordinary skill in the art would have been motivated to do this modification because in a configure-to-order process an order of a particular customer is integrated with the manufacturing/assembly process, as suggested by Forth et al. Therefore, the assembly process is part of the plan.

Regarding claims 11,45 and 54 Akasaka et al. in combination with Forth et al. discloses al the limitations of base claims 10,44 and 53 as stated above.

The method of claim 10, wherein the assembly instructions are provided in a pictorial form such that an assembly worker can view the product assembled(see page 6 paragraph 0052 line 18-20).

Regarding claims 12,22,35 and 46 Akasaka et al. discloses al the limitations of base claims 1,22,24 and 37 as stated above.

But, Akasaka et al. fails to clearly specify the user interface being a web based front end ordering system. However, Forth et al. discloses the method wherein the obtaining step further includes the step of entering the requirements through a user interface, the user interface being a web based front end ordering system(see page 7 paragraph 0057 line 5).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Akasaka et al. and combining it with the invention disclosed by Forth et al.

One of ordinary skill in the art would have been motivated to do this modification because it is common in the art of configure-to-order manufacturing systems that a customer configures computer systems and places orders via a web page as stated by Forth et al.

Regarding claims 28-31 Akasaka et al. discloses al the limitations of base claim 24 as stated above.

But, Akasaka et al. fails to clearly specify the components being hardware parts, software parts, personalized data and slot preferences. However, Forth et al. discloses wherein the component can be either a physical part or a logical part; and the requirements include hardware parts, software parts, service parts, and personalized data(see page 9 paragraph 0079 lines15-25); the personalized data includes an IP address, a computer name, and slot preferences(see page 7 paragraph 0056 lines 1-8).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Akasaka et al. and combining it with the invention disclosed by Forth et al.

One of ordinary skill in the art would have been motivated to do this modification because it is common in the art of configure-to-order manufacturing systems that a customer configures computer systems(including the hardware parts, software parts, personalized data) as stated by Forth et al.

Regarding claims 32 Akasaka et al. in combination with Forth et al. discloses al the limitations of base claims 31 as stated above.

Akasaka et al. further discloses the method wherein the automated manufacturing system includes a plurality of processes that use the plan to produce the computer product, the plurality of processes being software based(see abstract line 4).

Regarding claims 33 Akasaka et al. in combination with Forth et al. discloses al the limitations of base claims 32 as stated above.

Forth et al. further discloses the method wherein one process of the plurality of processes is an assembly process, the assembly process including the step of generating assembly instructions from the plan(see page 7 paragraph 0061 first three lines). Forth disclose that the order process is integrated with the manufacturing/assembly process thus assembly process is part of the plan.

Regarding claims 34 Akasaka et al. in combination with Forth et al. discloses al the limitations of base claims 33 as stated above.

Forth et al. further discloses the method of wherein the assembly instructions are provided in a pictorial form such that an assembly worker can view the product assembled, including the slot preferences for the hardware part(see page 6 paragraph 0052 line 18-20).

Response to Arguments

Applicant's arguments filed 12/08/03 have been fully considered but they are not persuasive. Regarding the term "build" is being interpreted as to develop according to a systematic plan. The reference definitely builds the product. No other interpretation was possible from the specification of the application. The term "manufacturing plan" was not found in the entire application. It seems to be a *new term*, therefore manufacturing plan is being interpreted to comprise: the designing procedure among other manufacturing procedures(assembly, testing, etc).

Since, the application does not clearly define a "manufacturing plan", it is also impossible to determine how to "convey *the manufacturing plan* to the automated manufacturing system, wherein the automated manufacturing system interprets *the manufacturing plan and builds* the product satisfying the requirements".

In the remarks submitted by the applicant on 12/08/03 the applicants states that support for the limitation regarding the "manufacturing plan" and the "automated manufacturing system interprets the manufacturing plan and builds the product" is found at page 18, line 1 to page 19, line 7. Page 18, line 1 to page 19, line 7 has been reviewed and said limitations were not found.

Applicant states that Akasaka et al. is directed to "designing", but it seems that the applicants manufacturing plan also comprise "designing". As known in the art a manufacturing system/process comprises of many process(designing, assembling, validating, etc.) and that each process is realized by performing other plurality of processes usually software based. A "descriptive language/document" is being interpreted as a "program".

Regarding the declaration pursuant to 37 CFR §1.131 the evidence/exhibit filed 12/08/03 does not include original drawings or disclosure of the invention. It is impossible to determine the original disclosure at that moment, therefore the Forth et al. reference is believed to be prior art.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to method and system for object oriented approach and data model for configure-to-order manufacturing system:

a. U.S. Pat. No. 5,463,555 to Ward et al., which discloses system and method for integrating a business environment with a process control environment.

b. U.S. Pat. No. 5,548,756 to Tantry et al., which discloses object-oriented architecture for factory management.

c. U.S. Pat. No. 5,995,757 to Amberg et al., which discloses software installation and testing for a build-to-order computer system.

d. U.S. Pat. No. 6,543,047 to Vrhel,Jr. et al., which discloses method and system for testing custom-configured software/hardware integration in a computer build-to-order manufacturing process.

The following publications are cited to further show the state of the art with respect to method and system for object oriented approach and data model for configure-to-order manufacturing system.

e. U.S. Pub. No. 2002/0120521 to Gupta et al., which discloses system and method for manufacturing and configuring intelligent electronic devices to order.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (703) 305-8009. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (703) 308-0538. The central official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Carlos Ortiz-Rodriguez
Patent Examiner
Art Unit 2125

cror

February 20, 2004

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100